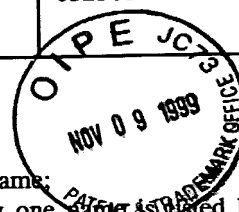


**COMBINED DECLARATION AND POWER OF ATTORNEY  
FOR UTILITY PATENT APPLICATION**

Attorney's Docket No.  
032501-006



As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name:

I BELIEVE I AM THE ORIGINAL, FIRST AND SOLE INVENTOR (if only one name is listed below) OR AN ORIGINAL, FIRST AND JOINT INVENTOR (if more than one name is listed below) OF THE SUBJECT MATTER WHICH IS CLAIMED AND FOR WHICH A PATENT IS SOUGHT ON THE INVENTION ENTITLED:

HETERODYNE INTERFEROMETRY FOR SMALL SPACING MEASUREMENT

the specification of which

(check one)

☐ is attached hereto;

☒ was filed on September 28, 1999 as

Application No. 09/407,177

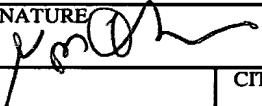
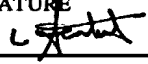
and was amended on \_\_\_\_\_;  
(if applicable)

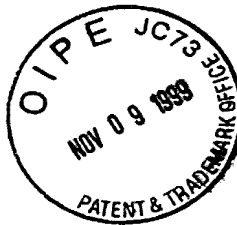
I HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED SPECIFICATION, INCLUDING THE CLAIMS, AS AMENDED BY ANY AMENDMENT REFERRED TO ABOVE;

I ACKNOWLEDGE THE DUTY TO DISCLOSE TO THE OFFICE ALL INFORMATION KNOWN TO ME TO BE MATERIAL TO PATENTABILITY AS DEFINED IN TITLE 37, CODE OF FEDERAL REGULATIONS, Sec. 1.56 (as amended effective March 16, 1992);

I do not know and do not believe the said invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to said application; that said invention was not in public use or on sale in the United States of America more than one year prior to said application; that said invention has not been patented or made the subject of an inventor's certificate issued before the date of said application in any country foreign to the United States of America on any application filed by me or my legal representatives or assigns more than twelve months prior to said application;

I hereby claim foreign priority benefits under Title 35, United States Code Sec. 119 and/or Sec. 365 of any foreign application(s) for patent or inventor's certificate as indicated below and have also identified below any foreign application for patent or inventor's certificate on this invention having a filing date before that of the application(s) on which priority is claimed:

COMBINED DECLARATION AND POWER OF ATTORNEY			Attorney's Docket No. 032501-006																																																																															
COUNTRY/INTERNATIONAL	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED																																																																															
			YES_ NO_																																																																															
			YES_ NO_																																																																															
<p>I hereby appoint the following attorneys and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">William L. Mathis</td> <td style="width: 10%;">17,337</td> <td style="width: 33%;">George A. Hovanec, Jr.</td> <td style="width: 10%;">28,223</td> <td style="width: 33%;">Peter K. Skiff</td> <td style="width: 10%;">31,917</td> </tr> <tr> <td>Peter H. Smolka</td> <td>15,913</td> <td>James A. LaBarre</td> <td>28,632</td> <td>Richard J. McGrath</td> <td>29,195</td> </tr> <tr> <td>Robert S. Swecker</td> <td>19,885</td> <td>E. Joseph Gess</td> <td>28,510</td> <td>Matthew L. Schneider</td> <td>32,814</td> </tr> <tr> <td>Platon N. Mandros</td> <td>22,124</td> <td>R. Danny Huntington</td> <td>27,903</td> <td>Michael G. Savage</td> <td>32,596</td> </tr> <tr> <td>Benton S. Duffett, Jr.</td> <td>22,030</td> <td>Eric H. Weisblatt</td> <td>30,505</td> <td>Gerald F. Swiss</td> <td>30,113</td> </tr> <tr> <td>Norman H. Stepno</td> <td>22,716</td> <td>James W. Peterson</td> <td>26,057</td> <td>Michael J. Ure</td> <td>33,089</td> </tr> <tr> <td>Ronald L. Grudziecki</td> <td>24,970</td> <td>Teresa Stanek Rea</td> <td>30,427</td> <td>Charles F. Wieland III</td> <td>33,096</td> </tr> <tr> <td>Frederick G. Michaud, Jr.</td> <td>26,003</td> <td>Robert E. Krebs</td> <td>25,885</td> <td>Bruce T. Wieder</td> <td>33,815</td> </tr> <tr> <td>Alan E. Kopecki</td> <td>25,813</td> <td>William C. Rowland</td> <td>30,888</td> <td>Todd R. Walters</td> <td>34,040</td> </tr> <tr> <td>Regis E. Slutter</td> <td>26,999</td> <td>T. Gene Dillahunty</td> <td>25,423</td> <td> </td> <td> </td> </tr> <tr> <td>Samuel C. Miller, III</td> <td>27,360</td> <td>Patrick C. Keane</td> <td>32,858</td> <td> </td> <td> </td> </tr> <tr> <td>Ralph L. Freeland, Jr.</td> <td>16,110</td> <td>Bruce J. Boggs, Jr.</td> <td>32,344</td> <td> </td> <td> </td> </tr> <tr> <td>Robert G. Mukai</td> <td>28,531</td> <td>William H. Benz</td> <td>25,952</td> <td> </td> <td> </td> </tr> </table>					William L. Mathis	17,337	George A. Hovanec, Jr.	28,223	Peter K. Skiff	31,917	Peter H. Smolka	15,913	James A. LaBarre	28,632	Richard J. McGrath	29,195	Robert S. Swecker	19,885	E. Joseph Gess	28,510	Matthew L. Schneider	32,814	Platon N. Mandros	22,124	R. Danny Huntington	27,903	Michael G. Savage	32,596	Benton S. Duffett, Jr.	22,030	Eric H. Weisblatt	30,505	Gerald F. Swiss	30,113	Norman H. Stepno	22,716	James W. Peterson	26,057	Michael J. Ure	33,089	Ronald L. Grudziecki	24,970	Teresa Stanek Rea	30,427	Charles F. Wieland III	33,096	Frederick G. Michaud, Jr.	26,003	Robert E. Krebs	25,885	Bruce T. Wieder	33,815	Alan E. Kopecki	25,813	William C. Rowland	30,888	Todd R. Walters	34,040	Regis E. Slutter	26,999	T. Gene Dillahunty	25,423			Samuel C. Miller, III	27,360	Patrick C. Keane	32,858			Ralph L. Freeland, Jr.	16,110	Bruce J. Boggs, Jr.	32,344			Robert G. Mukai	28,531	William H. Benz	25,952		
William L. Mathis	17,337	George A. Hovanec, Jr.	28,223	Peter K. Skiff	31,917																																																																													
Peter H. Smolka	15,913	James A. LaBarre	28,632	Richard J. McGrath	29,195																																																																													
Robert S. Swecker	19,885	E. Joseph Gess	28,510	Matthew L. Schneider	32,814																																																																													
Platon N. Mandros	22,124	R. Danny Huntington	27,903	Michael G. Savage	32,596																																																																													
Benton S. Duffett, Jr.	22,030	Eric H. Weisblatt	30,505	Gerald F. Swiss	30,113																																																																													
Norman H. Stepno	22,716	James W. Peterson	26,057	Michael J. Ure	33,089																																																																													
Ronald L. Grudziecki	24,970	Teresa Stanek Rea	30,427	Charles F. Wieland III	33,096																																																																													
Frederick G. Michaud, Jr.	26,003	Robert E. Krebs	25,885	Bruce T. Wieder	33,815																																																																													
Alan E. Kopecki	25,813	William C. Rowland	30,888	Todd R. Walters	34,040																																																																													
Regis E. Slutter	26,999	T. Gene Dillahunty	25,423																																																																															
Samuel C. Miller, III	27,360	Patrick C. Keane	32,858																																																																															
Ralph L. Freeland, Jr.	16,110	Bruce J. Boggs, Jr.	32,344																																																																															
Robert G. Mukai	28,531	William H. Benz	25,952																																																																															
<p>and: _____</p>																																																																																		
<p>Address all correspondence to: <span style="float: right;">Richard J. McGrath BURNS, DOANE, SWECKER &amp; MATHIS, L.L.P. P.O. Box 1404 Alexandria, Virginia 22313-1404</span></p>																																																																																		
<p>Address all telephone calls to: <u>Richard J. McGrath</u> at (703) 836-6620.</p>																																																																																		
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>																																																																																		
FULL NAME OF SOLE OR FIRST INVENTOR		SIGNATURE		DATE																																																																														
Bryan Kok Ann Ngoi				25 <sup>th</sup> OCT 99																																																																														
RESIDENCE		CITIZENSHIP																																																																																
Singapore		Singaporean																																																																																
POST OFFICE ADDRESS																																																																																		
Nanyang Technological University, School of Mechanical and Production Engineering, Nanyang Avenue, Singapore 639798																																																																																		
FULL NAME OF SECOND JOINT INVENTOR, IF ANY		SIGNATURE		DATE																																																																														
Krishnan Venkatakrishnan				25 <sup>th</sup> OCT 99																																																																														
RESIDENCE		CITIZENSHIP																																																																																
Singapore		Indian																																																																																
POST OFFICE ADDRESS																																																																																		
Blk 101, #05-170, Jurong East St-13, Singapore 600101																																																																																		



Patent  
Attorney's Docket No. 032501-006

Applicant or Patentee: Bryan Kok Ann Ngoi et al.  
Application or Patent No.: 09/407,177  
Filed or Issued: September 28, 1999  
For: Heterodyne Interferometry for Small Spacing Measurement

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 C.F.R. §§ 1.9(f) AND 1.27(b)) - INDEPENDENT INVENTOR**

As a below-named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 C.F.R. § 1.9(c) for purposes of paying reduced fees under Sections 41(a) and 41(b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled Heterodyne Interferometry for Small Spacing Measurement described in:

- ☐ the specification filed herewith  
☒ Application No. 09/407,177, filed September 28, 1999.  
☐ Patent No. \_\_\_\_\_, issued \_\_\_\_\_.

I have not assigned, granted, conveyed, or licensed and am under no obligation under contract or law to assign, grant, convey, or license any rights in the invention either to any person who could not be classified as an independent inventor under 37 C.F.R. § 1.9(c) if that person had made the invention, or to any concern that would not qualify as either a small business concern under 37 C.F.R. § 1.9(d) or a nonprofit organization under 37 C.F.R. § 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ no such person, concern, or organization  
☐ persons, concerns, or organizations listed below\*

\*NOTE: Separate verified statements are required from each named person, concern, or organization having rights to the invention averring to their status as small entities. (37 C.F.R. § 1.27.)

FULL NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

☐ individual ☐ small business concern ☐ nonprofit organization

FULL NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

☐ individual ☐ small business concern ☐ nonprofit organization

FULL NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

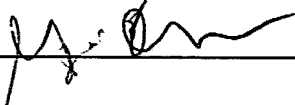
☐ individual ☐ small business concern ☐ nonprofit organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earlier of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 C.F.R. § 1.28(b).)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code; and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name Bryan Kok Ann Ngoi

Signature

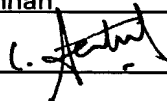


Date

25/10/99

Name Krishnan Venkatakrishnan

Signature



Date

25<sup>th</sup> Oct 99